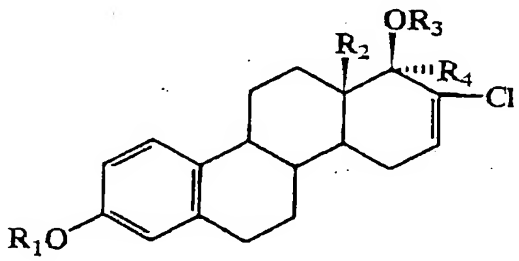
The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended) A method for regulating fertility with or without an additional follicular sex steroid comprising administering to a patient in need thereof a therapeutically effective amount of a ~~ERβ-selective ligand to a patient in need thereof~~ 17-Chloro-D homosteroid of formula I



(I)

in which

R_1 is a hydrogen atom or a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 is a C_{1-6} alkyl group,

R_3 is a hydrogen atom, a C_{1-6} alkyl radical, a C_{1-6} alkanoyl radical or a benzoylyl radical, and

R4 is a hydrogen atom, a C_{1-6} alkyl radical, a C_nF_{2n+1} group, in which n=1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical.

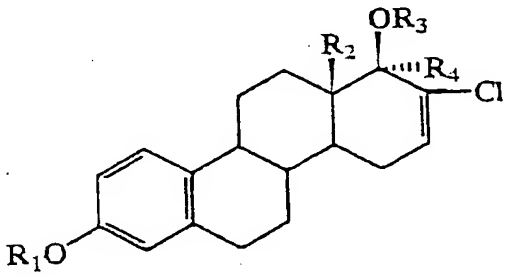
Claim 2 (Currently Amended) The method according to claim1, wherein a therapeutically effective amount of a 17-Chloro-D homosteroid of formula I ~~ERβ-selective agonist~~ is administered for the treatment of female infertility.

Claim 3 (Previously Presented) The method according to claim 2 in connection with in

vitro fertilization.

Claim 4 (Previously Presented) The method according to claim 2, wherein said female infertility is ovarian infertility.

Claim 5 (Currently Amended) A method for treating ovarian failure associated with aging comprising administering to a patient in need thereof a therapeutically effective amount of a ~~ERβ selective ligand to a patient in need thereof~~ 17-Chloro-D homosteroid of formula I



(I)

in which

R_1 is a hydrogen atom or a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 is a C_{1-6} alkyl group,

R_3 is a hydrogen atom, a C_{1-6} alkyl radical, a C_{1-6} alkanoyl radical or a benzoylyl radical, and

R4 is a hydrogen atom, a C_{1-6} alkyl radical, a C_nF_{2n+1} group, in which n=1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical.

Claim 6 (Currently Amended) The method according to claim 1, wherein a therapeutically effective amount of a ~~ERβ selective antagonist~~ 17-Chloro-D homosteroid of formula I is administered for ovarian contraception.

Claim 7 (Previously Presented) The method according to claim 6, wherein said method

inhibits folliculogenesis.

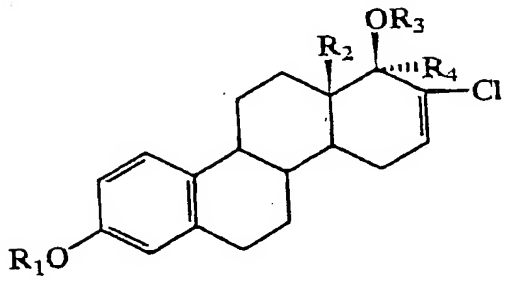
Claim 8 (Previously Presented) The method according to claim 6, wherein said method inhibits ovulation.

Claim 9 (Previously Presented) The method according to claim 6, wherein said method inhibits preimplantational development of ovulated oocytes.

Claim 10 (Currently Amended) A method for regulating fertility without additional use of a follicular sex steroid comprising administering a pharmaceutical composition comprising a ~~ERβ-selective ligand~~ 17-Chloro-D homosteroid of formula I according to claim 12 ~~1~~.

Claim 11 (Cancelled)

Claim 12 (Currently Amended) A 17-Chloro-D homosteroid of formula I



(I)

in which

R_1 is a hydrogen atom or a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 is a ~~C_{1-8}~~ C_{1-6} alkyl group,

R_3 is a hydrogen atom, a C_{1-6} alkyl radical, a C_{1-6} alkanoyl radical or a benzoylyl radical, and

R4 is a hydrogen atom, a C_{1-6} alkyl radical, a C_nF_{2n+1} group, in which n=1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical.

Claim 13 (Cancelled)

Claim 14 (Currently Amended) A compound ~~Compounds~~ of ~~general~~ formula I according to claim 12 ~~namely~~ which is:

17-Chloro-17aα-ethinyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-propinyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-13β-ethyl-17aα-methyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17aβ-acetoxy-17-chloro-17aα-methyl-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3-ol

17-chloro-17aα-(trifluoromethyl)-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(pentafluoroethyl)-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-methyl-17aβ-(methoxy)-17a,18a-dihomo-estra-1,3,5(10),16-tetraene-3-ol

17-chloro-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(pentafluoroethyl)-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-methyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-ethyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-ethinyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-propinyl-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol

17-chloro-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3,17aβ-diol-diacetate

17aβ-acetoxy-17-chloro-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3-ol

17-chloro-17aβ-methoxy-17aα-(trifluoromethyl)-17a-homoestra-1,3,5(10),16-tetraene-3-ol

17-chloro-(17aα)-21-(4'-methylsulfonylphenyl)-17a,18a-dihomogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

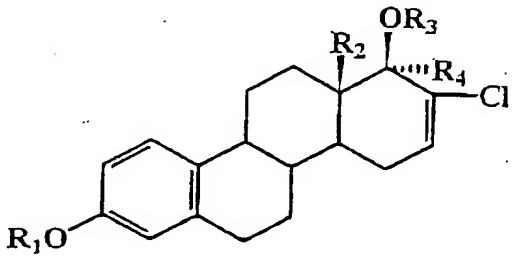
17-chloro-(17aα)-21-(phenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

17-chloro-(17aα)-21-(4'-cyanophenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol

17-chloro-(17aα)-21-(4'-acetylaminophenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol or

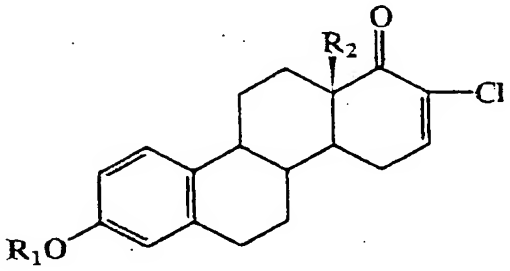
17-chloro-(17aα)-21-(4'-hydroxyphenyl)-13β-methyl-17a-homogona-1,3,5(10),16-tetraen-20-yne-3,17aβ-diol.

Claim 15 (Previously Presented) A process for the production of a 17-chloro-D-homosteroid of the formula I according to claim 12,



(I)

comprising converting a 17-chloro-1,3,5(10),16-tetraene-17-one of formula II



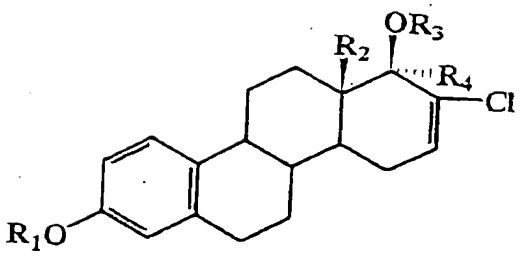
(II)

in which

R_1 is a hydrogen atom, a C_{1-5} alkyl radical, a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 is C_{1-6} alkyl group,

with a magnesium-organic reagent of general formula BrMg alkyl, BrMg alkenyl or BrMg alkinyl or with acetylene or an alkyl- or aryl-substituted acetylene in the presence of a base, or with a lithium-organic compound, or with a silicon-organic compound into a 17aα-substituted compound of formula III,



(III)

in which

R_1 is a hydrogen atom, a C_{1-6} alkyl radical, a C_{1-6} alkanoyl radical or a benzoyl radical,

R_2 is a C_{1-6} alkyl group,

R_3 is a hydrogen atom, a metal atom or a silyl group, and

R_4 is a hydrogen atom, a C_{1-6} alkyl group, a C_nF_{2n+1} group, in which n=1, 2 or 3, or a $C{\equiv}CR_5$ group, in which R_5 is a hydrogen atom, a C_{1-6} alkyl radical or an unsubstituted or substituted phenyl radical,

whereby in the case of R_5 = hydrogen, the free 17aα-ethinyl compound of general formula III is further modified by a SONAGASHIRA reaction to form compounds with $R_5 = C_6H_4R_6$, in which R_6 stands for a free or substituted hydroxyl group, amino group, thiol group, sulfamate group, sulfonyl group or a C_{1-6} alkyl group or a C_{6-12} aryl group.

Claim 16 (Currently Amended) The process according to claim 15 ~~14~~, wherein said compound of formula III in which R_1 is a C_{1-6} alkyl radical, is converted by ether cleavage into a free hydroxyl group.

Claim 17 (Currently Amended) The process according to claim 15 ~~14~~, wherein said compound of formula II, in which R_1 is an acyl radical, is converted by ether cleavage into a free hydroxyl groups.

Claim 18 (Currently Amended) The process according to claim 15 ~~14~~, wherein said compound of formula II in which R_3 is a hydrogen atom, is converted into ethers or esters.

Claim 19 (Previously Presented) A method for contraception in women comprising

administering a therapeutically effective amount of a compound of formula I according to claim 12.

Claim 20 (Previously Presented) A method for contraception in men comprising administering a therapeutically effective amount of a compound of formula I according to claim 12.

Claim 21 (Previously Presented) A method for treating benign or malignant proliferative diseases of the ovary comprising administering a therapeutically effective amount of a compound of formula I according to claim 12.

Claim 22 (Currently Amended) The method of claim 21 ~~20~~, wherein said malignant proliferative disease is ovarian cancer.

Claim 23 (Currently Amended) The method of claim 21 ~~20~~, wherein said malignant proliferative disease is a granulosa cell tumor.

Claim 24 (Previously Presented) A pharmaceutical composition comprising at least one compound according to claim 12, as well as a pharmaceutically compatible vehicle.

Claim 25 (Previously Presented) A pharmaceutical composition according to claim 12, further comprising a GnRH antagonist, a progesterone receptor antagonist, a mesoprogestin, a gestagen or a tissue-selective gestagen.

Claim 26 (Previously Presented) The method according to claim 2, in connection with an in vivo treatment.

Claim 27 (Currently Amended) The process according to claim 15 ~~method according to claim 14~~, wherein said base is tert-BuOK.

Claim 28 (Currently Amended) The process according to claim 15 ~~method according to claim 14~~, wherein said lithium organic compound is LiC_2F_5.

Claim 29 (Currently Amended) The process according to claim 15 ~~method according to claim 14~~, wherein said silicon-organic compound is trifluoromethyl trimethylsilane.